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1/29/03

Declaration of John S. McBride

1. I, John S. McBride declare as follows:
2. I hold a degree in Management Science from Duke University.
3. For approximately 20 years I have been involved in the development and sale of low particulate wiping cloths.
4. I currently hold the position of CEO with CONTEC, INC. a manufacturer of wiping cloths for use in particle sensitive environments and assignee of U.S. Patent Application 09/762,781.
5. I have reviewed U.S. Patent Application 09/762,781 as well as the Office Action of September 24 and the reference to Morin et al. cited therein.
6. I note that the Office Action relies on the statement in Morin et al. that the wiper may be of any geometric shape to support a conclusion that it would be obvious to one of ordinary skill in the art to form a hexagonal shape. In my opinion, this statement is incorrect due to the fact that prior to introduction of the hexagonal wipe by CONTEC the industry did not have an appreciation for the benefits to be realized from a non-quadrilateral geometry. Rather, as indicated by Morin et al., square configurations were preferred.
7. A key attribute of a wipe for a particle sensitive environment is the minimization of particulate contamination from the wipe when it is being used. Prior to introduction of the hexagonal wipe by CONTEC, in order to reduce particulate contamination the prior art focused on features such as materials of construction, particle reducing treatments such as heat setting, and edge sealing techniques such as seaming and fusion bonding. To my knowledge, there was no focus on using cutting geometry as a means of further controlling particle generation.
8. During the cutting operation particles tend to be generated from cut edges and may be scattered across the wiping surface away from the edge. In addition, during use, particles from a wipe may be generated from the cut edges of the wipe when small pieces of cut fiber become dislodged from the edge.
9. To the best of my knowledge, prior to introduction of the hexagonal wipe by CONTEC, the industry failed to appreciate that despite having a greater number of edges, a hexagonal wipe actually has a perimeter length which is substantially less than the perimeter length of a square wipe of equal area and that this reduced perimeter length may be beneficial in reducing the occurrence of particle generation.

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10. A regular hexagon having six contiguous equal length sides is characterized by the formula:

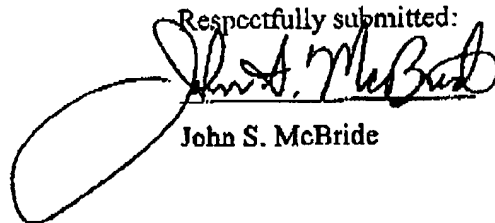
$$\frac{A}{a^2} = 2.5981$$

where "A" is the total area of the hexagon and "a" is the length of each side. Thus, a regular hexagon of 81 square inches (the same as the most preferred square construction in Morin et al.) has a total perimeter length of 33.5 inches while the square construction has a perimeter length of 36 inches. This reduction in cut perimeter length thus reduces the length over which edge particles may be generated both during cutting and during subsequent use.

11. Since the introduction of the hexagonal wipe by CONTEC, a number of major manufacturers of electronic components where particle sensitivity is particularly acute have embraced the product. Several of these manufacturers purchase polyester wipes exclusively in the hexagonal configuration.
12. In the year 2002, CONTEC sold approximately \$500,000.00 worth of the hexagonal wipes for use in particle sensitive applications.
13. The hexagonal wipe is currently the fastest growing dry wipe product being sold by CONTEC for use in electronic clean rooms where particle generation is particularly problematic.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted:



John S. McBride

Date: _____